# HPV-Associated Cancers In West Virginia



## HPV-Associated Cancers Quick Facts

- Between 2015-2019, about 47,199 HPV-associated cancers were diagnosed in the US each year, 26,177 among women, and 21,022 among men<sup>1</sup>.
- The most common HPVassociated cancer in women is cervical cancer, while oropharyngeal cancer is most common in men<sup>1</sup>.
- Generally, HPV is thought to cause about 90% of anal and cervical cancers, about 70% of vaginal and vulvar cancers, and more than 60% of penile cancers (Figure 1)<sup>1</sup>.
- Oropharyngeal cancers were originally thought to be mostly caused by tobacco and alcohol use, but newer studies indicate that about 70% of oropharyngeal cancers are caused by HPV (Figure 1)<sup>1</sup>.
- Of the High-risk HPV types, HPV16 and HPV18 are responsible for most HPVassociated cancers<sup>2</sup>.

For more information, please contact the West Virginia Cancer Registry.

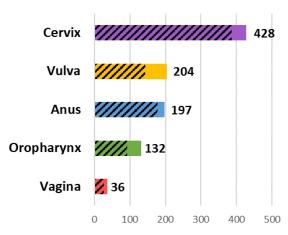
oeps.wv.gov/cancer (304) 356-4463

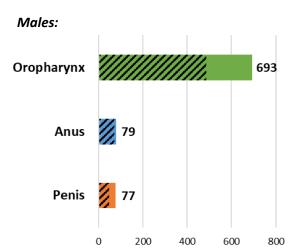
### What is HPV?

HPV, or Human Papillomavirus, is the most common sexually transmitted infection (STI) in the United States. HPV infection is so common that nearly all sexually active people, regardless of sex, are infected with HPV within months to a few years of becoming sexually active. In most cases, these infections show no symptoms, and the body can clear the infection on its own<sup>3</sup>. HPV is a group of more than 200 different viruses (called HPV types) that spread primarily through skin-to-skin contact. HPV viruses can be sorted one of two ways: low-risk and high-risk. Most of the low-risk types cause warts on the skin, while others cause warts on mucous membranes, like the mouth, throat, anus, and vagina. High-risk HPV viruses, however, can cause several forms of cancer, such as cervical, vaginal, anal, oropharyngeal, vulvar, and penile cancers<sup>2</sup>.

Figure 1: Case Counts for HPV-Associated Cancers and Estimated Proportion of Cancers Caused by HPV, West Virginia, 2015-2019<sup>1,4</sup>





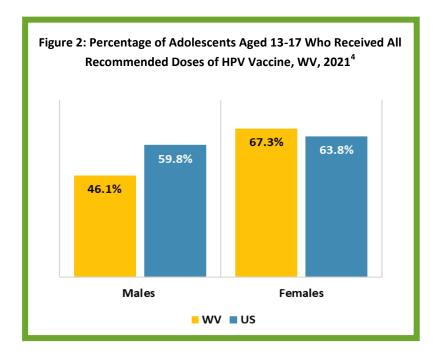


Estimated Proportion of Cancers Caused by HPV

## **HPV-Associated Cancers In West Virginia**

## Ways to Prevent HPV and HPV Associated Cancers<sup>2</sup>

- **Get Vaccinated** The HPV Vaccine (Gardasil 9) is FDA-approved to prevent infection from nine types of HPV. However, it cannot cure current HPV infections.
- <u>Get Screened for Cervical Cancer</u> About 90% of all cervical cancer cases are caused by HPV. Routine Pap Smears and HPV tests are the best way to find pre-cancers or cancer early when its easier to treat and cure.
- <u>Use Protection</u>— If you are sexually active, condoms and dental dams can lower the chance of HPV transmission, but not prevent it completely.



## Who should get the vaccine?<sup>2</sup>

The CDC recommends HPV vaccination for:

- All preteens (including boys and girls) at age 11 or 12 years (or can start as early as 9 years old)
- Everyone through age 26 years, if not vaccinated already

It is important for both males and females to get vaccinated, because both men and women can develop cancers of the mouth and throat, anal cancers, and genital warts. Women are at risk for cervical, vulvar and vaginal cancers, while men are at risk for penile cancers.

Table 1: Recommended HPV Vaccination Guidelines by Age Group<sup>5</sup>

9*-14 years	2 doses; 2nd dose administered 6-12 months after first dose OR 3 doses**; Only for those that received 2 doses less than 5 months apart
15-26 years	3 doses; Three dose schedule is 0, 1-2, and 6 months
27-45 years	While approved for those up to 45, it is not recommended
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#### References:

- Centers for Disease Control and Prevention. HPV-Associated Cancer Statistics. <a href="https://www.cdc.gov/cancer/hpv/statistics/index.htm">https://www.cdc.gov/cancer/hpv/statistics/index.htm</a>.
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- 2) National Cancer Institute. HPV and Cancer. <a href="https://www.cancer.gov/about-cancer/causes-prevention/risk/infectious-agents/hpv-and-cancer">https://www.cancer.gov/about-cancer/causes-prevention/risk/infectious-agents/hpv-and-cancer</a>. Accessed February 2023
- 3) Centers for Disease Control and Prevention. Basic Information about HPV and Cancer. <a href="https://www.cdc.gov/cancer/hpv/basic\_info/">https://www.cdc.gov/cancer/hpv/basic\_info/</a>. Accessed February 2023
- 4) U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool, based on 2021 submission data (1999-2019): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; www.cdc.gov/cancer/dataviz, released in June 2022.
- 5) Centers for Disease Control and Prevention. HPV Vaccination Recommendations. <a href="https://www.cdc.gov/vaccines/vpd/hpv/hcp/recommendations.html">https://www.cdc.gov/vaccines/vpd/hpv/hcp/recommendations.html</a>. Accessed February 2023

<sup>\*\* 3</sup> doses are also recommended for immunocompromised persons 9-26 years old